

8A(d)(2) of the National Science Foundation Act of 1950.

(b) **REVIEW AND RECOMMENDATIONS REQUIRED.**—Not later than 180 days after the date of the enactment of this Act, the Director of the Office of Science and Technology Policy, in consultation with the Director of the National Science Foundation and the Director of the National Institute of Standards and Technology, shall—

(1) review—

(A) the structure of current technology research and commercialization arrangements with regard to public-private partnerships; and

(B) the extent to which intellectual property developed with Federal funding—

(i) has been used by foreign business entities;

(ii) is being used to manufacture in the United States rather than in other countries; and

(iii) is being used by foreign business entities domiciled or by foreign business entities affiliated with or subsidiary to foreign business entities in the People's Republic of China.

(2) develop recommendations for such legislative or administrative action as may be necessary—

(A) to further incentivize industry participation in public-private partnerships for the purposes of accelerating technology research and commercialization, including alternate ways of accounting for in-kind contributions and value of partially manufactured products;

(B) to ensure that intellectual property developed with Federal funding is commercialized in the United States; and

(C) to ensure that intellectual property developed with Federal funding is not being used by foreign business entities or by foreign business entities affiliated with or subsidiary to foreign business entities domiciled in the People's Republic of China; and

(3) submit to the Secretary of Commerce and Congress—

(A) the findings of the Director of the Office of Science and Technology Policy with respect to the reviews conducted under paragraph (1); and

(B) the recommendations developed under paragraph (2).

#### **SEC. 11. STUDY ON EMERGING SCIENCE AND TECHNOLOGY CHALLENGES FACED BY THE UNITED STATES AND RECOMMENDATIONS TO ADDRESS THEM.**

(a) **SHORT TITLE.**—This section may be cited as the “National Strategy to Ensure American Leadership Act of 2021” or the “National SEAL Act of 2021”.

(b) **STUDY.**—

(1) **IN GENERAL.**—The Secretary of Commerce (referred to in this section as the “Secretary”) shall seek to enter into an agreement with the National Academies of Sciences, Engineering, and Medicine to conduct a study—

(A) to identify the 10 most critical emerging science and technology challenges facing the United States; and

(B) to develop recommendations for legislative or administrative action to ensure United States leadership in matters relating to such challenges.

(2) **ELEMENTS.**—The study conducted under paragraph (1) shall include identification, review, and evaluation of the following:

(A) Matters pertinent to identification of the challenges described in paragraph (1)(A).

(B) Matters relating to the recommendations developed under paragraph (1)(B), including with respect to education and workforce development necessary to address each of the challenges identified under paragraph (1)(A).

(C) Matters related to the review of key technology areas by the Directorate for Technology and Innovation of the National Science Foundation under section 8A(d) of the National Science Foundation Act of 1950.

(D) An assessment of the current relative balance in leadership in addressing the challenges identified in paragraph (1)(A) between the United States, allies or key partners of the United States, and the People's Republic of China.

(3) **TIMEFRAME.**—

(A) **AGREEMENT.**—The Secretary shall seek to enter into the agreement required by paragraph (1) on or before the date that is 60 days after the date of enactment of this Act.

(B) **FINDINGS.**—Under an agreement entered into under paragraph (1), the National Academies of Sciences, Engineering, and Medicine shall, not later than 1 year after the date on which the Secretary and the National Academies enter into such agreement, transmit to the Secretary the findings of the National Academies with respect to the study conducted pursuant to such agreement.

(c) **REPORT.**—

(1) **IN GENERAL.**—Not later than 30 days after the date on which the Secretary receives the findings of the National Academies of Sciences, Engineering, and Medicine with respect to the study conducted under subsection (b), the Secretary shall submit to Congress a “Strategy to Ensure American Leadership” report on such study.

(2) **CONTENTS.**—The report submitted under paragraph (1) shall include the following:

(A) The findings of the National Academies of Sciences, Engineering, and Medicine with respect to the study conducted under subsection (b).

(B) The conclusions of the Secretary with respect to such findings.

(C) The recommendations developed under subsection (b)(1)(B).

(D) Such other recommendations for legislative or administrative action as the Secretary may have with respect to such findings and conclusions.

(3) **CLASSIFIED ANNEX.**—The report submitted under paragraph (1) shall be submitted in unclassified form, but may include a classified annex if the Secretary determines appropriate.

(d) **INFORMATION FROM FEDERAL AGENCIES.**—

(1) **IN GENERAL.**—The National Academies of Sciences, Engineering, and Medicine may secure directly from a Federal department or agency such information as the National Academies of Sciences, Engineering, and Medicine consider necessary to carry out the study under subsection (b).

(2) **FURNISHING INFORMATION.**—On request of the National Academies of Sciences, Engineering, and Medicine for information, the head of the department or agency shall furnish such information to the National Academies of Sciences, Engineering, and Medicine.

(e) **CONSULTATION.**—The Secretary of Defense and the Director of National Intelligence shall provide support upon request from the Secretary of Commerce or the National Academies to carry out this section.

(f) **NON-DUPLICATION OF EFFORT.**—In carrying out subsection (b), the Secretary shall, to the degree practicable, coordinate with the steering committee established under section 236(a) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116-283).

#### **SEC. 12. COORDINATION OF ACTIVITIES.**

The Director of the Office of Science and Technology Policy, the Director of the National Economic Council, the Director of the Office of Management and Budget, the Director of the National Science Foundation, the

Secretary of Commerce, and the Secretary of Energy shall, as applicable, coordinate with respect to activities of—

(1) the university technology centers established under section 8A(d)(6) of the National Science Foundation Act of 1950;

(2) the regional technology hubs under section 28 of the Stevenson-Wylder Technology Innovation Act of 1980, as added by section 7;

(3) the Manufacturing USA Program established under section 34(b)(1) of the National Institute of Standards and Technology Act (15 U.S.C. 278s(b)(1));

(4) Federally funded research and development centers;

(5) National Laboratories, as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801); and

(6) Federal laboratories, as defined in section 4 of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3703).

#### **SEC. 13. PERSON OR ENTITY OF CONCERN PROHIBITION.**

No person published on the list under section 1237(b) of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 (Public Law 105-261; 50 U.S.C. 1701 note) or entity identified under section 1260H of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116-283) may receive or participate in any grant, award, program, support, or other activity under—

(1) section 8A of the National Science Foundation Act of 1950 (Public Law 81-507), as added by section 3;

(2) the Endless Frontier Fund under section 4;

(3) the supply chain resiliency program under section 6;

(4) section 28(b)(1) of the Stevenson-Wylder Technology Innovation Act of 1980 (Public Law 96-480), as added by section 7(a);

(5) section 29 of the Stevenson-Wylder Technology Innovation Act of 1980 (Public Law 96-480), as added by section 8; or

(6) the Manufacturing USA Program, as improved and expanded under section 9.

#### **SUBMITTED RESOLUTIONS**

#### **SENATE RESOLUTION 165—CALLING ON THE GOVERNMENT OF THE RUSSIAN FEDERATION TO PROVIDE EVIDENCE OR TO RELEASE UNITED STATES CITIZEN PAUL WHELAN**

Mr. PETERS (for himself and Ms. STABENOW) submitted the following resolution; which was referred to the Committee on Foreign Relations:

S. RES. 165

Whereas United States citizen Paul Whelan is a resident of Novi, Michigan, and a United States Marine Corps veteran;

Whereas Paul Whelan traveled to Moscow for the wedding of a personal friend on December 22, 2018;

Whereas Russia's Federal Security Service arrested Paul Whelan at the Metropol Hotel in Moscow on December 28, 2018, and charged him with espionage;

Whereas the Federal Security Service has never provided any evidence of supposed wrongdoing;

Whereas Paul Whelan was imprisoned in Lefortovo Prison and was held there for more than 19 months after his arrest in pre-trial detention;

Whereas the Federal Security Service has not provided any evidence of supposed wrongdoing;

Whereas a Moscow court extended Paul Whelan's pre-trial detention multiple times

without publicly presenting justification or evidence of wrongdoing;

Whereas even Paul Whelan's Federal Security Service-appointed lawyer, Vladimir Zherebenkov, said on May 24, 2019, "[The Federal Security Service] always roll[s] out what they have, but in this case, we've seen nothing concrete against Whelan in five months. That means there is nothing.";

Whereas the then United States Ambassador to the Russian Federation, Jon Huntsman, responded on April 12, 2019, to a question about the detention of Paul Whelan, "If the Russians have evidence, they should bring it forward. We have seen nothing. If there was a case, I think the evidence would have been brought forward by now.";

Whereas then Secretary of State Mike Pompeo met with Russian Foreign Minister Sergey Lavrov on May 14, 2019, and urged him to ensure United States citizens are not unjustly held abroad;

Whereas the Kremlin has refused Paul Whelan full access to his lawyer and the so-called evidence against him, and any evidence he has seen is in Russian, a language Paul does not read or speak;

Whereas Lefortovo pre-trial detention facility and the Ministry of Foreign Affairs refused to provide medical treatment for Paul Whelan's medical condition, despite being aware of its worsening state, resulting in emergency surgery on May 29, 2020;

Whereas Paul Whelan was wrongfully convicted on June 15, 2020, and sentenced to 16 years in a Russian labor camp by a three-judge panel, in a trial witnessed by United States Ambassador John Sullivan, who referred to it as "a mockery of justice" due to the denial of a fair trial and the exclusion of defense witnesses;

Whereas, in August 2020, on an unknown day because he was moved secretly, Paul Whelan was transferred to camp IK-17, a penal labor camp in Mordovia, where he is forced to work 6 days a week in a garment factory;

Whereas Ambassador John Sullivan, while visiting Paul Whelan at the labor camp in Mordovia, stated that "Russian authorities. . . have never shown the world evidence of his guilt," and reiterated his call that the Russian authorities correct this injustice and release Mr. Whelan; and

Whereas Secretary of State Antony Blinken spoke with Russian Foreign Minister Sergei Lavrov on February 4, 2021, and urged him to release Americans detained in Russia, including Paul Whelan and Trevor Reed, so that they are able to return home to their families in the United States: Now, therefore, be it

*Resolved*, That the Senate—

(1) implores the Government of the Russian Federation present credible evidence on the allegations against Paul Whelan or immediately release him from imprisonment;

(2) implores the Government of the Russian Federation comply with its international treaty obligations and provide unrestricted consular access to Paul Whelan while he remains imprisoned in Russia;

(3) calls on the Government of the Russian Federation to provide Paul Whelan and all other political prisoners their constitutionally afforded due process rights and universally recognized human rights; and

(4) expresses sympathy to the family of Paul Whelan for this travesty to justice and personal hardship, and expresses hope that their ordeal can soon be brought to a just end.

## SENATE RESOLUTION 166—RECOGNIZING THE DUTY OF THE FEDERAL GOVERNMENT TO CREATE A GREEN NEW DEAL

Mr. MARKEY (for himself, Mr. WYDEN, Ms. WARREN, Mr. SANDERS, Mr. PADILLA, Mr. VAN HOLLEN, Mr. BLUMENTHAL, Mrs. GILLIBRAND, Mr. MERKLEY, Mr. MURPHY, Ms. HIRONO, Ms. KLOBUCHAR, and Mr. BOOKER) submitted the following resolution; which was referred to the Committee on Environment and Public Works:

S. RES. 166

Whereas the October 2018 report entitled "Special Report on Global Warming of 1.5 by the Intergovernmental Panel on Climate Change and the November 2018 Fourth National Climate Assessment report found that—

(1) human activity is the dominant cause of observed climate change over the past century;

(2) a changing climate is causing sea levels to rise and an increase in wildfires, severe storms, droughts, and other extreme weather events that threaten human life, healthy communities, and critical infrastructure;

(3) global warming at or greater than 2 degrees Celsius beyond preindustrialized levels will cause—

(A) mass migration from the regions most affected by climate change;

(B) more than \$500,000,000,000 in lost annual economic output in the United States by the year 2100;

(C) wildfires that, by 2050, will annually burn at least twice as much forest area in the western United States than was typically burned by wildfires in the years preceding 2019;

(D) a loss of more than 99 percent of all coral reefs on Earth;

(E) more than 350,000,000 more people to be exposed globally to deadly heat stress by 2050; and

(F) a risk of damage to \$1,000,000,000,000 of public infrastructure and coastal real estate in the United States; and

(4) global temperatures must be kept less than 1.5 degrees Celsius above preindustrialized levels to avoid the most severe impacts of a changing climate, which will require—

(A) global reductions in greenhouse gas emissions from human sources of 40 to 60 percent from 2010 levels by 2030; and

(B) net-zero global emissions by 2050;

Whereas, because the United States has historically been responsible for a disproportionate amount of greenhouse gas emissions, having emitted 20 percent of global greenhouse gas emissions through 2014, and has a high technological capacity, the United States must take a leading role in reducing emissions through economic transformation;

Whereas the United States is currently experiencing several related crises, with—

(1) life expectancy declining while basic needs, such as clean air, clean water, healthy food, and adequate health care, housing, transportation, and education, are inaccessible to a significant portion of the United States population;

(2) a 4-decade trend of wage stagnation, deindustrialization, and antilabor policies that has led to—

(A) hourly wages overall stagnating since the 1970s despite increased worker productivity;

(B) the third-worst level of socioeconomic mobility in the developed world before the Great Recession;

(C) the erosion of the earning and bargaining power of workers in the United States; and

(D) inadequate resources for public sector workers to confront the challenges of climate change at the Federal, State, and local level; and

(3) the greatest income inequality since the 1920s, with—

(A) the top 1 percent of earners accruing 91 percent of gains in the first few years of economic recovery after the Great Recession;

(B) a large racial wealth divide amounting to a difference of 20 times more wealth between the average White family and the average Black family; and

(C) a gender earnings gap that results in women earning approximately 80 percent as much as men, at the median;

Whereas climate change, pollution, and environmental destruction have exacerbated systemic racial, regional, social, environmental, and economic injustices (referred to in this preamble as "systemic injustices") by disproportionately affecting indigenous peoples, communities of color, migrant communities, deindustrialized communities, depopulated rural communities, the poor, low-income workers, women, the elderly, the unhoused, people with disabilities, and youth (referred to in this preamble as "frontline and vulnerable communities");

Whereas, climate change constitutes a direct threat to the national security of the United States—

(1) by impacting the economic, environmental, and social stability of countries and communities around the world; and

(2) by acting as a threat multiplier;

Whereas the Federal Government-led mobilizations during World War II and the New Deal created the greatest middle class that the United States has ever seen, but many members of frontline and vulnerable communities were excluded from many of the economic and societal benefits of those mobilizations; and

Whereas the Senate recognizes that a new national, social, industrial, and economic mobilization on a scale not seen since World War II and the New Deal era is a historic opportunity—

(1) to create millions of good, high-wage jobs in the United States;

(2) to provide unprecedented levels of prosperity and economic security for all people of the United States; and

(3) to counteract systemic injustices: Now, therefore, be it

*Resolved*, That it is the sense of the Senate that—

(1) it is the duty of the Federal Government to create a Green New Deal—

(A) to achieve the greenhouse gas and toxic emissions reductions needed to stay under 1.5 degrees Celsius of warming, through a fair and just transition for all communities and workers;

(B) to create millions of good, high-wage union jobs and encourage collective bargaining agreements to ensure prosperity and economic security for all people of the United States;

(C) to invest in the infrastructure and industry of the United States to sustainably meet the challenges of the 21st century;

(D) to secure for all people of the United States for generations to come—

(i) clean air and water;

(ii) climate and community resiliency;

(iii) healthy food;

(iv) access to nature; and

(v) a sustainable environment; and

(E) to promote justice and equity by stopping current, preventing future, and repairing historic oppression of indigenous peoples, communities of color, migrant communities, deindustrialized communities, depopulated rural communities, the poor, low-income workers, women, the elderly, the unhoused,